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1560 BROADWAY			MERLINO, ALYSON MARIE	
	SUITE 1200 DENVER, CO 80202		ART UNIT	PAPER NUMBER
,			3673	
			MAIL DATE	DELIVERY MODE
			02/19/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/562,166	KRISCH ET AL.
Office Action Summary	Examiner	Art Unit
	ALYSON M. MERLINO	3673
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tinwill apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 24 A	s action is non-final. ince except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 19-68 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 19-68 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or are subject to restriction and/or are subject to by the Examine 10) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 23 December 2005 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct	wn from consideration. or election requirement. er. are: a) □ accepted or b) ☒ object drawing(s) be held in abeyance. Sec	e 37 CFR 1.85(a).
11) The oath or declaration is objected to by the Ex		,
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list 	ts have been received. ts have been received in Applicati ority documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate

DETAILED ACTION

1. The amendments and remarks filed 24 November 2008 are entered. The examiner acknowledges applicant's amendments to claims 19-68.

Double Patenting

2. Applicant is advised that should the first claim 45 be found allowable, the second claim 45 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the housing having a lock core and a knob shaft must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

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changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

- 4. Claims 19, 20, 23, 40, 53, and 56 objected to because of the following informalities:
 - a. In regards to claims 19 and 23, line 5, the phrase "the lock cores or knob shafts" should be changed to "the lock core and the knob shaft" since the claim now recites "at least one," in lines 10 and 11, the phrase "the two lock cores or the two knob shafts" should be "the lock core or the knob shaft" since the claim now recites "at least one," and in line 18 of claim 18 and line 14 of claim 23, the phrase "or rotary sleeve" should be "or a rotary sleeve."
 - b. In regards to claims 19, 20, 40, 53, and 56, the phrase "can be" should be changed to "is capable of being" in all instances.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 19-68 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- 7. In regards to claims 19, 23, 36, 40, 53, and 56, it is unclear how the lock tab is freely rotatable relative to the lock core or the knob shaft when there is no apparent mechanism acting on the lock tab to rotate it. For examination purposes, it will be considered that the lock tab is freely rotatable because it is not connected for rotation by the lock core or knob shaft until the connection is created, until further clarification from applicant.
- 8. In regards to claims 19, 36, and 53, it is unclear how the driver is moved in a direction relative to the long axis of the knob shaft only, when the preceding lines of the claim recite that the movement of the blocking element can be actuated by either the lock core or the knob shaft. For examination purposes, it will be considered that the drier is moved relative to a long axis of either the lock core or the knob shaft until further clarification from applicant.
- 9. **In regards to claim 23**, it is unclear to which portion of the device the driver is formed. Specifically, the claim does not recite that the driver is part of the blocking element. For examination purposes, the driver will be considered as part of the blocking element until further clarification from applicant.
- 10. In regards to claims 25, 27, 42, 44, 58, and 60, it is unclear to which component of the claimed device in claims 19 applicant is referring as the "pin" in claim 25. Furthermore, it is unclear how the "slide" includes the compression spring, when

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the specification states that the spring is arranged in the interior of sleeve 26 and the free end 27 of the sleeve is formed with a widening protrusion. For examination purposes, the claim will be given a broad interpretation until further clarification from applicant.

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- 11. **In regards to claims 25, 42, and 58**, it is unclear how the free end of the slide 24 enters the recess of the lock tab or is guided in the rotary sleeve, when it is clear from Figure 2 that the slide remains in component 11. For examination purposes, the claim will be given a broad interpretation until further clarification from applicant.
- 12. **In regards to claim 37**, it is unclear how the lock core and knob shaft are connected to rotate when the lock cylinder of claim 36 does not necessarily require a lock core and knob shaft, only at least one of a lock core and/or knob shaft. For examination purposes, the claim will be given a broad interpretation until further clarification from applicant.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 19, 21, 22, 29, 35, 36, 38, 39, 53-55, 62, and 68 are rejected under 35 U.S.C. 102(b) as being anticipated by Niemann (EP 1 065 335 A1). The computer-generated translation of Niemann will be referred to within the rejection by paragraph numbers.

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In regards to claims 19, 36, 37, and 53, Niemann discloses an 15. electromechanical lock cylinder (Figure 1) that cooperates with evaluation electronics to recognize access authorization, comprising a housing 11 that includes two opposite cylindrical receptacles 12, 13, at least one of which includes a lock core 14, which can be operated by a key (apparent from Figure 1) that is mounted to rotate, in which the lock core cooperates with the lock tab 17, 18, which operates, in particular, a bolt or latch of a door lock (Paragraph 26), and with a fitting key (Paragraph 25), an electromechanically driven blocking or coupling element (Figure 4b) is moved from a rest position (Figure 2) to an operating position and produces a splined connected between the key and the lock tab (Figure 5b), whereas the lock tab, in the rest position of the blocking or coupling element, is freely rotatable (apparent that there is no connection in Figure 2) relative to the lock core, wherein the blocking or coupling element is arranged on the lock (apparent from Figure 1) and rotates with it (apparent from Figures 2 and 5, rotates when coupled together), and includes an eccentric 26 that is rotatable between a first (Figure 4b) and second (Figure 5b) position such that when the eccentric is in the first position, a driver 27" in communication therewith is in a rest position (apparent from Figure 4b), and when the eccentric is rotated from the first position to the second position, the driver is moved in a direction substantially perpendicular to a long axis (see figure below) of the lock core into an operating position (see figure below) in which the driver engages in a recess 29 of the lock tab.

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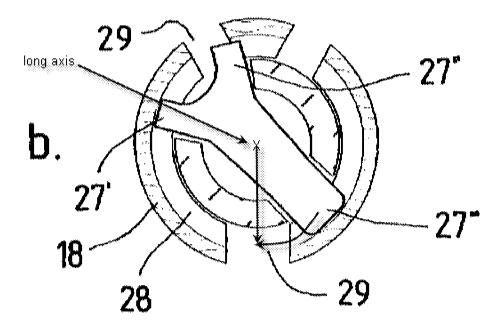


FIG.4

- 16. In regards to claims 21, 22, 38, 39, 54, and 55, Niemann discloses that the rest position and/or the operating position of the driver lie beyond the corresponding dead centers of the eccentric by a predetermined angle of rotation of 10° to 30° beyond the corresponding dead center (position of driver, apparent from Figures 4b and 5b).
- 17. **In regards to claims 29 and 62,** Niemann discloses that the driver is held in the rest position by spring force (force created by spring 39).
- 18. **In regards to claims 35 and 68,** Niemann discloses that the blocking or coupling element includes an electromagnetic drive (Paragraph 35).

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Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 20. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 21. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niemann (EP 1 065 335 A1) in view of Kornhofer et al. (WO 02/088492 A2). The computer-generated translation of Kornhofer et al. and Niemann will be referred to within the rejection by paragraph numbers. Niemann discloses the lock core that is capable of being operated by a key (apparent from Figure 1), as applied to claim 19 above, but fails to disclose that a continuous lock core which extends from one side of the housing to the opposite side and is capable of being operated from both sides by a key. Kornhafer et al. teaches an electromechanical lock (Figure 1) having a continuous lock core 2, 3, which extends from one side of a housing 1 to the opposite side and is

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capable of being operated from both side by a key (apparent from Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a lock core on the opposite side of the housing from the lock core 2, disclosed by Niemann, since second lock core would move the lock tab to actuate the latch of the door and to enhance the security of the device by having two key-operated lock cores.

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- 22. Claims 23, 24, 40, 41, 46, 52, 56, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kornhofer et al. (WO 02/088492 A2) in view of Niemann (EP 1 065 335 A1). The computer-generated translation of Kornhofer et al. and Niemann will be referred to within the rejection by paragraph numbers.
- 23. In regards to claims 23 and 56, Kornhofer discloses an electromechanical lock cylinder (Figure 1) that cooperates with evlauation electronics to recognize access authorization (apparent from Paragraph 12), comprising a housing 1 that includes two opposite cylindrical receptacles (apparent receptacles receiving components 2 and 3, Figure 1), at least one of which includes a lock core 2, 3 which can be operated by a key (Paragraph 12) that is mounted to rotate, which the lock core cooperates with a lock tab (portion between components 2 and 3, Figure 1), which operates, in particular a bolt or a latch of a door lock (apparent from Figure 1), and, with a fitting key, and an electromechanically driven blocking element 8 is moved from a rest position (position shown in shadow, Figure 3) to an operating position (position shown in Figure 1).

 Kornhofer et al. further discloses an eccentric 6, which moves a driver (portion of 8 between component 7 and the end of the 8, Figure 2) back and forth between the rest position and the operating position (apparent from Figure 3), in which it engages a

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recess 10 of the lock core 2, wherein the eccentric has a pin 7 arranged eccentrically around a motor shaft (apparent from Figure 1), Which engages a groove 9 extending across the lift movement of the driver (apparent from Figure 3) and perpendicular to the motor shaft (apparent from Figures 1 and 2), whose position and length are dimensioned so that a rotary movement from the rest position into the operating position is only possible in one direction of rotation, and the rotational movement from the operating position into the rest position of the driver is only possible in the opposite direction of rotation (apparent from Figures 2 and 3). Kornhofer et al. fails to disclose that the blocking element produces a splined connection between the key and lock tab, whereas the lock tab, in the rest position of the blocking element is freely rotatable relative to the lock core, and wherein the blocking element is arranged on the lock core and rotates with it. Niemann teaches an electromechanical lock cylinder (Figure 1) that includes a lock core 14, which can be operated by a key (apparent from Figure 1) that is mounted to rotate, in which the lock core cooperates with the lock tab 17, 18, which operates, in particular, a bolt or latch of a door lock (Paragraph 26), and with a fitting key (Paragraph 25), an electromechanically driven blocking or coupling element (Figure 4b) is moved from a rest position (Figure 2) to an operating position and produces a splined connected between the key and the lock tab (Figure 5b), whereas the lock tab, in the rest position of the blocking or coupling element, is freely rotatable (apparent that there is no connection in Figure 2) relative to the lock core, wherein the blocking or coupling element is arranged on the lock (apparent from Figure 1) and rotates with it (apparent from Figures 2 and 5, rotates when coupled together). It would have been

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obvious to one of ordinary skill in the art at the time the invention was made to position the electromechanical blocking element to be on the lock core so that the element rotates with it, and creates a splined connection between the key and the lock tab, as taught by Niemann, since Niemann teaches the use of a blocking element for creating the splined connection and since it has been held that rearranging parts of an invention involves only routine skill in the art.

- 24. **In regards to claims 24, 41, and 57**, Kornhafer et al. discloses that the length and position of the groove are chosen, in order to permit further rotation of the eccentric from the rest position to the operating position of the driver beyond the dead center by the angle of rotation and vice versa (apparent from Figures 2 and 3).
- 25. In regards to claim 40, Kornhofer discloses an electromechanical lock cylinder (Figure 1) that cooperates with evaluation electronics to recognize access authorization (apparent from Paragraph 12), comprising a housing 1 that includes two opposite cylindrical receptacles (apparent receptacles receiving components 2 and 3, Figure 1), at least one of which includes a lock core 2, 3 which can be operated by a key (Paragraph 12) that is mounted to rotate, which the lock core cooperates with a lock tab (portion between components 2 and 3, Figure 1), which operates, in particular a bolt or a latch of a door lock (apparent from Figure 1), and, with a fitting key, and an electromechanically driven blocking element 8 is moved from a rest position (position shown in shadow, Figure 3) to an operating position (position shown in Figure 1).

 Kornhofer et al. further discloses an eccentric 6, which moves a driver (portion of 8 between component 7 and the end of the 8, Figure 2) back and forth between the rest

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position and the operating position (apparent from Figure 3), in which it engages a recess 10 of the lock core 2, wherein the eccentric has a pin 7 arranged eccentrically around a motor shaft (apparent from Figure 1), Which engages a groove 9 extending across the lift movement of the driver (apparent from Figure 3) and perpendicular to the motor shaft (apparent from Figures 1 and 2), whose position and length are dimensioned so that a rotary movement from the rest position into the operating position is only possible in one direction of rotation, and the rotational movement from the operating position into the rest position of the driver is only possible in the opposite direction of rotation (apparent from Figures 2 and 3). Kornhofer et al. fails to disclose that the blocking element produces a splined connection between the key and lock tab, whereas the lock tab, in the rest position of the blocking element is freely rotatable relative to the lock core, wherein the blocking element is arranged on the lock core and rotates with it, and that the two opposite cylindrical receptacles includes on one side of the housing the lock core (lock core 2 disclosed by Kornhafer et al.) and on the opposite side, a knob shaft, which is connected to rotate in unison with a knob. Niemann teaches an electromechanical lock cylinder (Figure 1) that includes a lock core 14 within a first cylindrical receptacle 12, with the lock core being operated by a key (apparent from Figure 1) that is mounted to rotate, in which the lock core cooperates with the lock tab 17, 18, which operates, in particular, a bolt or latch of a door lock (Paragraph 26), and with a fitting key (Paragraph 25), a knob shaft 16 within a second cylindrical receptacle 13, which is connected to rotate in unison with a knob 19, an electromechanically driven blocking or coupling element (Figure 4b) is moved from a

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rest position (Figure 2) to an operating position and produces a splined connected between the key and the lock tab (Figure 5b), whereas the lock tab, in the rest position of the blocking or coupling element, is freely rotatable (apparent that there is no connection in Figure 2) relative to the lock core, wherein the blocking or coupling element is arranged on the lock (apparent from Figure 1) and rotates with it (apparent from Figures 2 and 5, rotates when coupled together). It would have been obvious to one of ordinary skill in the art at the time the invention was made to position the electromechanical blocking element to be on the lock core so that the element rotates with it, and creates a splined connection between the key and the lock tab, as taught by Niemann, since Niemann teaches the use of a blocking element for creating the splined connection and since it has been held that rearranging parts of an invention involves only routine skill in the art. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a knob shaft and knob on the opposite side of the housing from the lock core 2, disclosed by Kornhafer et al, since the knob shaft and knob would move the lock tab to actuate the latch of the door and to provide ease of actuation of the latch possibly from the inside surface of the door.

- 26. **In regards to claim 46**, Kornhafer et al. discloses that the driver is held in the rest position by spring force (spring force created by spring 13).
- 27. **In regards to claim 52**, Kornhafer et al. discloses that the blocking element includes an electric motor drive 5.
- 28. Claims 25-28, 42-45, and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemann (EP 1 065 335 A1) in view of Goldman (US-6865916).

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29. In regards to claim 25, 42, and 58, Niemann discloses the electromechanical lock cylinder as applied to claims 19, 36, and 53, with the driver having a free end (end of 27", Figure 4b), but fails to disclose that the driver includes a slide, in whose interior a compression spring is arranged, which cooperates with a free end of the driver.

Goldman teaches an electromechanical lock cylinder including a driver 42 that has a slide 28, 32, and in whose interior a compression spring 34 is arranged, which cooperates with a free end of the driver (apparent from Figure 3B). Since the inclusion of the slide and spring within the driver disclosed by Niemann would not hinder the ability of the driver to be placed in the rest position, it would have been obvious to one of ordinary skill in the art at the time the invention was made to specify that the driver be constructed of a sleeve and spring instead of one piece for ensuring that the driver engaged the recess of the lock tab (Figure 5b of Niemann), since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art.

- 30. In regards to claims 26, 28, 43, 45, 59, and 61, Niemann in view of Goldman teaches that the depth of the recess of the lock tab (Figure 5b) is dimensioned so that when the driver is engaged, the compression spring is still under tension (Figure 3B of Goldman).
- 31. In regards to claims 27, 44, and 60, Niemann in view of Goldman teaches that the sleeve on its side opposite the free end of the driver has a stop (portion between reference character 28 and 32 indicators, Figure 3B), against which a thickened end of the slide stops (Figure 3B).

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32. Claims 30-34, 47-51, and 63-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemann (EP 1 065 335 A1) in view of Büser et al. (US-5010750). Niemann discloses the electromechanical lock cylinder as applied to claims 19, 21, 22, 36, and 53 above, but fails to disclose that the lock cylinder includes recording devices, such as a sensor, to record the status of various components of the lock through the use of a signal. Büser et al. teaches an electromechanical lock cylinder having multiple recording devices S1, S2 such as a sensor for evaluating the status of components. Since the inclusion of recording devices such as a sensor would not hinder the ability of the electromechanical lock cylinder to actuate a bolt or latch of a door lock, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include recording devices, such as sensors, to evaluate the status of a component of a device in order to enhance the security and efficiency of operation of the device.

Response to Arguments

- 33. Applicant's arguments with respect to claims 19-68 have been considered but are moot in view of the new ground(s) of rejection.
- 34. In regards to applicant's remarks concerning the Non-Responsive letter mailed 22 July 2008, the examiner has not set forth a 112, second paragraph, rejection regarding the supposed admission by applicant's representative in the telephonic interview on 26 June 2008 that the "lock core" and the "knob shaft" are the same components. It is clear that the position of the electromechanical blocking or coupling element is capable of being located with and cooperates with a lock core or a knob shaft.

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35. The examiner appreciates applicant's amendments to the claims, and therefore, the drawing objection and the objections to claims 19, 23, 36, 40, 53, and 56 set forth in the previous office action are withdrawn. However, a new drawing objection has been set forth above in light of the amendments made to claim 40.

- 36. The examiner appreciates applicant's amendments to claims 25-28, 36, 42-45, and 58-61, and therefore, the 112, second paragraph, rejections of the claims set forth in the previous office action are withdrawn.
- 37. After further review, previously objected to claims 23, 24, 40, 41, 56, and 57 for including allowable subject matter are no longer considered to contain allowable subject matter in light of the prior art discussed in the rejections above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALYSON M. MERLINO whose telephone number is (571)272-2219. The examiner can normally be reached on Monday through Friday, 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on (571) 272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patricia L Engle/ Supervisory Patent Examiner, Art Unit 3673

AM February 17, 2009